

# GRASSROOTS

WINTER 2008

## 2007 Water Quality Improvement Fund

*grants awarded*

Thirty-seven projects were recently awarded more than \$3.5 million through a competitive grant process to reduce nonpoint source pollution from entering Virginia's waters. Chosen from 73 applicants, these projects will reduce the pollutant load by approximately 135,130 pounds of nitrogen, 8,580 pounds of phosphorus, 7,960 tons of sediment and a substantial number of fecal coliform colonies statewide.

The competitive, matching grant program, managed by DCR, is derived from one of Virginia's strongest pieces of clean water legislation. Virginia's Water Quality Improvement Act (WQIA) was written to reduce nitrogen and phosphorus runoff into Virginia waters and was established as a driving force to meet the requirements of the multi-state Chesapeake Bay Agreement.

WQIA goals are "to restore and improve the quality of state waters and to protect them from impairment and destruction for the benefits of current and future citizens of the Commonwealth of Virginia." Because this responsibility is shared, the General Assembly created the Water Quality Improvement Fund (WQIF) to provide grant monies for individual projects and programs to help meet the goals of WQIA.



*Creek targeted for restoration work in Harrisonburg. Photo courtesy of Harrisonburg.*

*See "2007 WQIF," on page 5*



## Prince William County's rare gem

The power of partnerships is truly being demonstrated through a land conservation project in one of the fastest growing areas of Virginia.

Merrimac Farm in Prince William County is a 300-acre farm originally owned by Marine Col. Dean McDowell. Following his death in 2002, heirs began looking into conserving the property for public, passive recreation. Passive recreation is experiencing nature through activities like photography, nature walks and bird watching.

Kim Hosen, executive director of the Prince William Conservation Alliance (PWCA), has led the five-year, \$3 million initiative to conserve this property. "Acquiring this property is an important part of our efforts to preserve a network of high quality, natural open space," she said.

Hosen began working with the Virginia Department of Game and Inland Fisheries to acquire the land as a wildlife management area. She was able to secure matching funds through the DCR-managed Land and Water Conservation Fund, which provided \$820,000 of the total cost.

This land is a special hideaway tucked into Prince William development. As of June 2007, 108 bird species have been spotted on the

*See "Rare gem," on page 4*



# Conservation Connection

News from DCR Director Joseph H. Maroon

## 2007 year-end review

**T**his past year has been truly exciting at DCR. We knew that several activities related to the Jamestown 400th anniversary events would keep us busy, but 2007 also proved to be a year of additional advancements and noteworthy accomplishments for all of our programs. Here is a recap of a few of the highlights.

**400th anniversary events** - DCR's involvement in the state's 400th anniversary events included a re-enactment of the English colonists' first steps in America at First Landing State Park. This was a signature event in the year-long commemoration that was attended by more than 8,000 people. DCR also joined with the Virginia Department of Historic Resources to display an exhibit at America's Anniversary Weekend in Jamestown.

**York River water trail** - Related to the 2007 commemoration was DCR's completion of "John Smith's Adventures on the Pamaunk Flu." This water trail along the York, Pamunkey and Mattaponi rivers interprets the interaction between John Smith and early settlers and the Native Virginian tribes in the area. The trail was produced to complement the award-winning "John Smith's Adventures on the James River" water trail that DCR completed in October 2006.

**State parks special events** - Virginia's State Parks achieved a milestone by serving more than 7 million visitors and hosting special programs, such as the of "Blowin' the Dust Off" Tour by one of Virginia's finest musicians, Steve Bassett, along with Michele Nixon & Drive. DCR also hosted the National Association of State Park Directors conference in Williamsburg, where a groundbreaking agreement between state park directors and the National Park Service was reached that targeted initiatives to reconnect America's youth to the outdoors.

This agreement was one of the tangible outcomes to the children-in-nature movement spreading across the country. It started with Richard Louv's book, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. The book sparked a call to action that encourages children and families

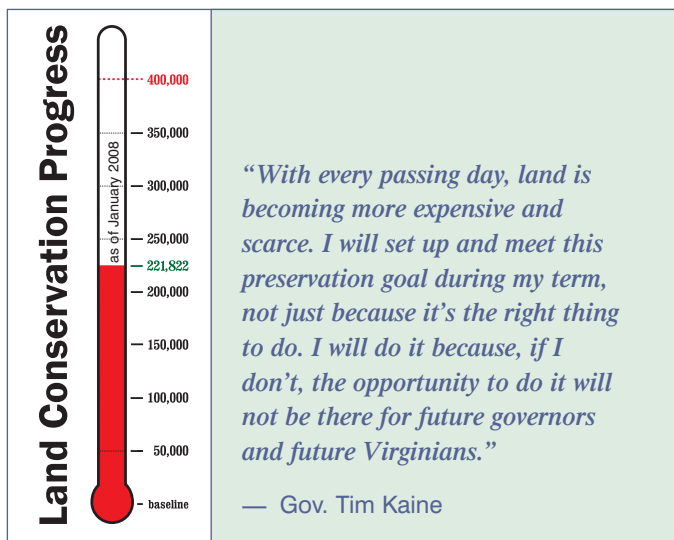
to get outdoors. Virginia was extremely fortunate to host Louv at three separate events this year: the annual Environment Virginia Symposium at Virginia Military Institute, the Outdoor Writers Association of America conference in Roanoke, and a conservation forum in Richmond hosted by the James River Association. Louv's message was also a focus at the DCR Director's Forum held in July.

**Virginia Outdoors Plan** - The children-in-nature theme was also picked up in DCR's 2007 *Virginia Outdoors Plan (VOP)*, which is soon due out for release. This document is developed by DCR's recreational planning staff to help all levels of the private and public sector meet the needs of outdoor recreation, land conservation and open space planning. The VOP, which provides guidance for the protection of lands through the Virginia Land Conservation Foundation, serves as the official statewide comprehensive open space plan and enables Virginia to take part in the federal Land and Water Conservation Fund (LWCF) program.

**Land conservation** - Conserving Virginia's lands remained a top priority for DCR this year. As of Dec. 31, 2007, Virginia had protected 221,822 acres towards Gov. Kaine's goal of preserving an additional 400,000 acres of land by 2010. The governor views his goal as a gift to Virginia of 1,000 acres for each of its 400 years.

In addition, DCR staff members discovered and corrected an error of about 120,000 acres in the year 2000's baseline of acres to be preserved in the Chesapeake Bay watershed. This results in a total 360,000 acres that still need to be protected to reach the Bay land conservation goal by 2010.

However, DCR did its part this year by acquiring 677 acres for state parks and natural areas in 2007. We also assumed new responsibilities associated with the land preservation tax credit program, administered \$6.2 million in grants to acquire lands or conservation easements through the Virginia Land Conservation Foundation, and helped sponsor the Governor's Land Conservation Forum in Southern Virginia.



**Land conservation on the web** - To provide the public with land conservation information, our Natural Heritage Program launched the Land Conservation Data Explorer, an online tool that allows the public to search and map information on all conserved lands. DCR also improved its land conservation website.

**Water quality** - We continued to improve water quality on several fronts during 2007. The department’s Chesapeake Bay Local Assistance Program has been working with the 84 Tidewater Virginia localities that fall under the Chesapeake Bay Preservation Act. All localities have met the first two stages of compliance, and agency staff is now working with localities to review their codes and address areas where those codes conflict with Bay Act requirements and the protection of water quality.

**Soil and water conservation** - DCR and the Virginia Soil and Water Conservation Board have also revised the process for approval of local erosion and sediment control programs. This change reflects the next step in improving our oversight of and assistance to localities in their implementation of this important pollution prevention program.

A number of advancements for healthier waters were also made on the agricultural front. In November, I signed on behalf of the Commonwealth an agreement with Virginia’s poultry companies to reduce by 30 percent the amount of phosphorus found in poultry litter by 2010. One way this will be achieved is through the addition of cutting-edge enzymes, such as phytase, to poultry feed that allows the birds to better absorb the phosphorus found in their food.

Even more significant was the availability of \$18 million in our agricultural cost-share incentive program used to help farmers install conservation practices. This year, with the cooperative partnership of the local soil and water conservation districts,

we focused more of the funds on five priority practices. A promising development to watch for 2008 was the start-up of a statewide coalition of conservation and agricultural groups pushing the General Assembly for more consistent and substantial funding for this effort.

**Policy and regulation** - DCR continued significant efforts to revise regulations for the management of water quality and water quantity under our Stormwater Management Program. We are also close to finalizing amendments to Virginia’s dam regulations to enhance the Dam Safety Program and improve public safety.

**Dam safety** - Beginning in December 2007, DCR revamped an existing fund and started its first solicitation of applications for loans to assist private owners and local governments with qualified dam rehabilitation, dam break inundation zone mapping, and floodplain mitigation and reduction projects.

**Natural area preserves** - DCR undertook, along with the Board of Conservation and Recreation, a year-long review of the Commonwealth’s Natural Area Preserve System. This rapidly expanding system is now up to 52 nature preserves totaling more than 42,000 acres. The close of the year brought exciting news about the pending acquisition of the Crow’s Nest property in Stafford County. The site promises to be a jewel in the system.

**New state park facilities** - And finally, we opened new state park facilities, including cabins at Bear Creek Lake, Occoneechee, James River, Kiptopeke and Claytor Lake and meeting facilities at Bear Creek Lake and Claytor Lake. We dedicated the newly renovated meeting hall at Westmoreland in honor of Tayloe Murphy, former delegate and secretary of natural resources, and his wife Helen.

This year, we also unveiled a new system of informational kiosks at all of our state parks, largely funded by the Dominion Foundation.

These are but some of the highlights regarding the agency’s many important advances. I commend the men and women who work at DCR for their outstanding efforts. We remain committed to “being intentional” about improving Virginia’s natural and outdoor recreation resources. I look forward to reporting to you on additional progress in 2008.

*Joseph H. Maroon*





*Merrimac Farm has more than 100 acres of nontidal forested wetlands. Photo courtesy of the Prince William Conservation Alliance.*

*continued from page 1*

## Rare gem

property, which includes more than 100 acres of nontidal, forested wetlands. This type of wetland is among the rarest in the state. The farm also borders the Occoquan Reservoir and Cedar Run, both of which are on Virginia's dirty waters list. However, Cedar Run's floodplain is prime habitat for an impressive number of Virginia bluebells (*Mertensia virginica*). Every spring, one can see their display stretch for almost a mile along the creek.

The property is also adjacent to Quantico Marine Corps base. Part of the plan for the overall project is the purchase of an easement along the base's border to buffer it from incompatible development. PWCA has been working with the U.S. Department of Defense Encroachment Partnering Program on this effort.

DCR Director Joe Maroon said, "I am pleased that we have been able to work with the Department of Defense, the local nonprofit, and the Virginia Department of Game and Inland Fisheries to make progress in Northern Virginia toward advancing the governor's goal of conserving 400,000 acres of land by 2010, and to protect this special property."

Merrimac Farm has also been recognized by the Washington Smart Growth Alliance as a 2007 Regional Conservation Priority. According to their report, this list exists "to recognize

and support the initiatives most likely to improve the quality of life in our metropolitan region over the next several decades." Merrimac Farm was chosen with five other properties, including the National Mall, because of its native habitats, rare species and wetlands; the importance of a natural area in Northern Virginia for passive recreation; and for its broad-based collaboration between federal government, state government, conservation groups and a private landowner.

This project has been a labor of love for Hosen. The 2007 VLCF award was not the first time she tried for this grant. After the project was turned down in 2005, Hosen drove PWCA's 2007 application to Richmond to hand deliver it. Development of the property was looming on the horizon, and Hosen knew that securing VLCF funding would turn this now-or-never project into a reality.

"This funding is a huge milestone," said Hosen. "Now that it is secured, we hope to have the farm open to the public by June 2008.

"Our hope is that very quickly the partners will be able to open the site from dawn to dusk for public use," she continued. "The farm will provide valuable respite from the hectic pace in Northern Virginia."



continued from page 1

# 2007 WQIF

In years where project funding is available, winning projects are chosen from the two major areas of Virginia: rivers that drain to the Chesapeake Bay, and the Southern Virginia rivers that flow outside the bay watershed. All projects are targeted to restore streams that do not meet water quality standards, or to protect or restore other priority waters, such as wildlife habitat or sources of drinking water.

Of the 37 awarded projects, 24 are in the Chesapeake Bay watershed and 12 fall into the Southern rivers areas. One project in the Virginia Beach area will affect both parts of the state. Here is a sampling of the projects.

## **Southern rivers watersheds projects**

### *Virginia Department of Game and Inland Fisheries (DGIF): multiple stream restoration projects*

DGIF will work with landowners to restore more than 13,000 linear feet of stream-bank at sites in the Tennessee and Roanoke rivers watersheds. The sites' stream restoration effort will help address impairments on several streams in Bristol and the counties of Montgomery, Tazewell, Washington and Wise.

Bill Bennett is a stream restoration biologist with DGIF who has been working with landowners in the headwaters of the North Fork Roanoke River.

"The landowners have really come together in the valley to address many of the water quality issues that are occurring in the North Fork Roanoke and have been a huge help in my connecting with the community," said Bennett.

"And the fact that these neighbors are coming together to restore their watershed allows us to do contiguous restoration work along the waterway," he continued. "Instead of one spot here and one spot there, we're able to do watershed-wide restoration, which is

much more beneficial to the ecology of the area."

WQIF funds provide the portion of the match needed for DGIF's Landowner Incentive Program, enabling this project to achieve both DCR and DGIF goals. Specific to DCR's WQIA goals, this project will prevent 2,580 tons of sediment from entering these waterways.

### *Roanoke County: Mudlick Creek urban stream restoration at Garst Mill Park*

Roughly 2,900 linear feet of stream is targeted for restoration along Mudlick Creek at Garst Mill Park in Roanoke County. This project is a continuance of a 2006 WQIF grant in which funding is being used to restore another section of the same creek.

County Engineer George Simpson manages the project. Simpson said that stream banks average 7½ feet through this highly trafficked park.

"We had to put up bright orange fencing to keep people out of the creek. Now, instead of rip rap for streambank stabilization, we're trying to mimic nature in our restoration efforts. We're thinking, 'How would mother nature rebuild if she had the opportunity?'"

With a regional stormwater retention pond upstream and the restoration work at Garst Mill, the county embraces a total watershed approach to improving water quality in the county as well as the whole Roanoke Valley. Estimated annual nonpoint source pollution reductions are 1,556 pounds of nitrogen, 532 pounds of phosphorus and 659 tons of sediment.

Simpson continued, "This approach will also benefit Mudlick Creek's receiving waterway, the Roanoke River. We hope to learn from the project and apply it to the other county watersheds."

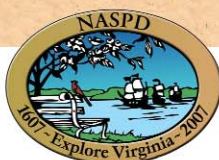
See "2007 WQIF," on page 11



*A stream cleanup on Blacks Run in downtown Harrisonburg. Photo courtesy of Harrisonburg.*

# National conference on parks yields historic agreement

*Virginia State Parks get accolades*



## FIRST LANDING STATE PARK

*"I hope we can reach a day when families and children move seamlessly from state parks to national parks, with doors open everywhere and pathways that lead from one program to another, from one life-changing and life-enriching experience to another,"*

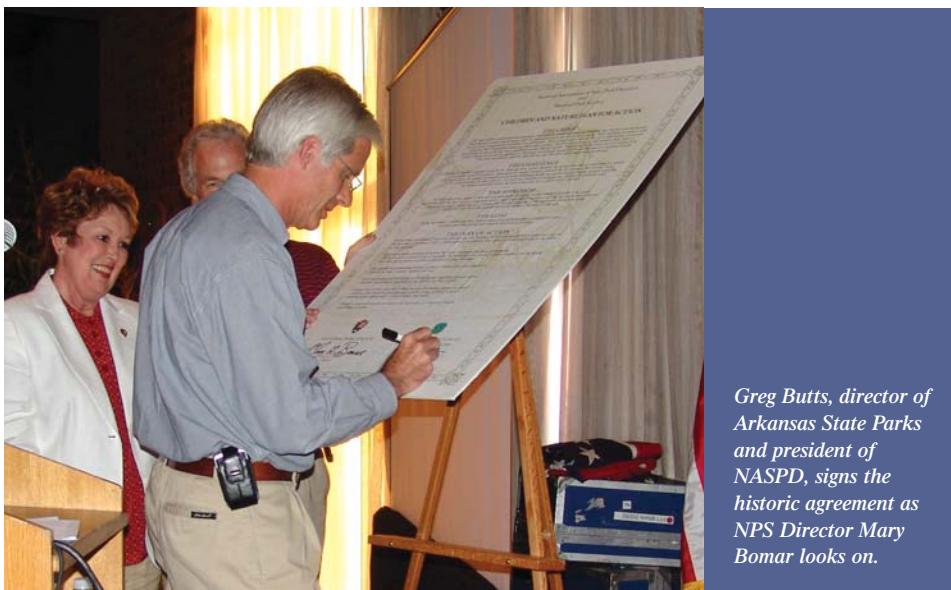
— Dirk Kempthorne

A three-day, national conference on parks held in Williamsburg ended with a ground-breaking agreement targeted at getting more of America's children back into nature.

The National Association of State Park Directors under the leadership of newly elected President Greg Butts, director of Arkansas State Parks, and the National Park Service Leadership Council led by National Park Service Director Mary Bomar, signed a resolution pledging that state and national parks would work together to combat "the loss of a child-nature connection." A connection the resolution says "threatens their independent judgment, their value of place, the ability to feel awe and wonder, their sense of stewardship for the earth, and their psychological and physical health."

Joe Elton, Virginia's State Parks director and the conference chair, called the agreement "historic and timely. There is little doubt that many





*Greg Butts, director of Arkansas State Parks and president of NASPD, signs the historic agreement as NPS Director Mary Bomar looks on.*

of the nation's youth prefer to spend time indoors watching TV and playing video games rather than getting the outdoor recreation and contact with nature that is so important to our mental and physical health."

Elton credited author Richard Louv, who wrote *Last Child in the Woods*; Saving our Children from Nature-Deficit Disorder, with sparking a national movement and being the driving force behind this children-in-nature movement.

Elton also credits U.S. Secretary of the Interior Dirk Kempthorne, National Parks Director Mary Bomar and Virginia Lt. Gov. Bill Bolling with driving home the importance of addressing this national issue during their conference presentations.

In his remarks at the conference, Kempthorne pledged to rally the federal agencies he oversees to work collaboratively with the states. "I hope we can reach a day when families and children move seamlessly from state parks to

national parks, with doors open everywhere and pathways that lead from one program to another, from one life-changing and life-enriching experience to another," he said. "A day when children beg their parents to take them to parks as much as, and maybe more than, they beg them to buy a new video game."

In other conference actions, outgoing NASPD President Charles Salkin, director of Delaware State Parks, presented Virginia Director Joe Elton with the 2007 NASPD Distinguished Service Award for "leadership to the conservation, interpretation and enhancement of our nation's natural and cultural state park treasures."

Johnny Finch, president of Virginia Association of Parks, also accepted a President's Award on behalf of the association. The award "recognizes an individual or organization that has made an extraordinary contribution at a state, regional or national level, furthering the goal of a system of state parks."

## Agreement highlights

NPS Director Mary Bomar called the state and national parks the front line in the effort to reconnect children and their families to outdoor recreation and nature. The compact signed by the state and national parks recognizes that by working together they can make a bigger impact. Specifically the agreement calls on the state and national parks to:

- Focus on individual initiatives to increase the public awareness and value of connecting children and nature, toward a goal of improving the knowledge of our nation's natural resources and the health and welfare of present and future generations of young Americans.
- Join in a continuing dialogue to discuss common issues and implement solutions to create a seamless system of services.
- Share information and knowledge on developing and expanding natural resource education and recreation opportunities for children and families.
- Engage other federal, state, local, tribal and non-government partners in shared technology and interactive programs and problem-solving activities to achieve mutually agreed upon goals to connect children and nature.
- Promote a national campaign to recognize the importance of connecting children and families to nature.

## Virginia stormwater regulations update deadline extended

The Virginia Stormwater Management Program was created by the 2004 Virginia General Assembly as a consolidation of the responsibilities of three agencies and four boards. It transferred administrative authority for oversight of federally regulated municipal separate storm sewer systems and construction activities under the Clean Water Act from the Virginia Department of Environmental Quality and the State Water Control Board to DCR and the Virginia Soil and Water Conservation Board. Additional stormwater authorities were also transferred from the Chesapeake Bay Local Assistance Board. The program became effective in January 2005.

Since taking over administration of this program, DCR has embarked on a process to update existing regulations. This includes several different actions that must be completed before the regulations can take effect, which include:

- Completion of standards and procedures for the delegation of stormwater management authority to localities by the board.
- Development of updated "best management practice" (BMP) design criteria to control nonpoint source pollution as well as water quality and quantity criteria.
- Establishment of a new BMP clearinghouse website where the standards will be posted.
- Development of a statewide fee schedule applicable to every regulated land disturbing activity.
- Revision of the *Virginia Stormwater Management Handbook*.

"An important part of the process is to establish technical criteria that strengthen water quality and water quantity standards," said Eric Capps, erosion and sediment control and construction permitting manager. Capps is part of the DCR team working on this process.

All of these actions had to be taken before the board could authorize the administration of a qualifying local program. A stormwater regulatory technical advisory committee (TAC) was created to assist in this process.

For the past year and a half, DCR and the TAC worked to meet these goals. On Sept. 21, 2007, DCR staff presented draft proposed regulations to the Virginia Soil and Water Board, where public comment was also received. The board determined that the regulations were on the right track. However, in an effort to better clarify the authority for the regulatory action, the board voted to withdraw the action and to instruct the Department to initiate a new action that better defined the board's regulatory intent.

David Dowling, DCR's policy, planning and budget director suggested that this decision will represent only a minor delay in advancing the regulations and it will allow additional time for technical refinement of the proposed regulations.

Throughout the continued development of the draft proposed regulations, DCR staff will continue to work with engineers and other experts to refine the proposed water quality criteria, develop the BMP website, complete an economic analysis, and complete handbook revisions. There also will be opportunities for public comment. All technical advisory committee meetings are open to the public, and there will be a mandatory public comment period and multiple public hearings after the Virginia Soil and Water Conservation Board approves the regulations.

Staff expects draft proposed regulations to be ready for public comment during the summer of 2008. If you would like more information, please visit DCR's law and regulations page, [www.dcr.virginia.gov/lawregs.shtml](http://www.dcr.virginia.gov/lawregs.shtml).

## Cutting-edge technology

brought to  
Virginia  
State Parks



*A family uses a new state parks kiosk.*

**P**icture yourself on a trail, three miles from the nearest telephone. A swift storm moves in to catch you off guard—now you're stuck in the middle of nowhere. Would you trust the map you have to get you to the nearest safe place, as quickly as possible? This is exactly what happened to one man whose experience led to an innovative way to look at trails and other park information.

Fred Lochner of Imperial Multimedia found himself caught one day in an electrical storm on a trail in Wisconsin. His trail map was so bad that he had no idea the best route to safety. This sparked an idea that later led to the installation of kiosks capable of Global Positioning System (GPS) mapping in every Virginia State Park—the first of its kind statewide.

Unveiled April 9, 2007, at First Landing State Park by Gov. Tim Kaine, these kiosks provide park visitors with virtual tours of state parks.





From left to right: DCR Director Joe Maroon, Dominion Foundation's Marjorie Grier, Gov. Tim Kaine, Imperial Multimedia's Fred Lochner, DCR State Parks Director Joe Elton, Dominion's Bob Blue and Virginia Association for Parks' Johnny Finch.

***"This system enhances a park visitor's stay by providing information on the park, nearby attractions, and even local emergency information. These interactive kiosks also can help a visitor plan future visits to our state park system."***

— Gov. Tim Kaine

The stations allow users to access GPS-based trail information, wildlife spotting guides, information on park amenities, printable guides and maps, program descriptions, schedules and more.

"The amount of information contained in this system really is amazing," said Kaine.

The idea to provide this service in the parks came from a display at the 2004 National Association of State Parks Directors conference. Presentations covered this technology's beginnings in Wisconsin after Lochner's experience getting lost in the wilderness. So impressed were DCR staff members that they began to search for funding to provide this innovative technology in Virginia. Dominion Virginia Power stepped up to the plate, promising \$300,000 from its philanthropic foundation.

"This type of cutting-edge technology will allow park visitors to experience in greater detail some of Virginia's most beautiful locations," said William C. Hall Jr., vice president of Corporate Communications and Community Affairs at Dominion and president of the Dominion Foundation. "We believe this will immensely increase the accessibility and popularity of Virginia's State Parks. Dominion is proud to be able to help bring this feature to future park visitors."

Additional partnerships provided the other \$300,000 needed, including locally owned and operated shops and attractions.

"This project is truly a public-private partnership," said DCR Director Joseph Maroon. "Dominion, our other sponsors and numerous advertisers are making it possible for us to bring this new service to our park guests."

*See "Cutting-edge technology," on page 10*

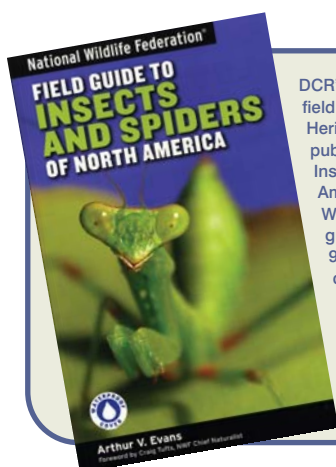
# Cutting-edge technology

Bid requests went out for development of the Virginia product, which Imperial Multimedia won. Their staff members visited each state park, took 30,000 pictures, and hiked every trail to plot GPS points and gather the most accurate data possible. They marked benches, trailheads and waterways to complete the maps.

Other information in the kiosks includes area amenities and siteseeing opportunities. Local vendors and attractions also have an opportunity to purchase advertising space on the kiosks.

Lawrence Fisher, director of Experience Development for Imperial Multimedia, stated, "Imperial Multimedia and the Commonwealth of Virginia strongly believe in promoting tourism and recreation based on economic development in and around the state parks. As a result of this belief, the project has been developed to create opportunities for local organizations to participate, with the option of adding enhanced content describing their business or service."

"Imagine park guests having the ability to preview trails and amenities, plan their visit, print out custom maps and guides showing points of interest and information tailored specifically to them or their families," said Warren Wahl, deputy director of DCR's state parks. "Our goal is to help our guests access a world of information about Virginia's natural places and the resources available to them, in and around, the state parks."



DCR's very own **Art Evans**, field zoologist for the Natural Heritage Program, has recently published "Field Guide to Insects and Spiders of North America." This National Wildlife Federation field guide identifies more than 940 species through 2,000 close-up color photographs.

Congratulations to Mr. Evans for this valuable contribution to the field of natural heritage.

## Unprecedented coalition fighting nonpoint source pollution

A unique coalition of groups has formed to fight nonpoint source pollution in Virginia's waters. In an unprecedented united front, 10 environmental and agricultural groups have asked Gov. Tim Kaine to include \$100 million a year for the next 10 years in the state budget. This would fully fund state cost-share programs for farmers to reduce polluted runoff from agricultural lands.

In an Aug. 29, 2007, letter to Gov. Kaine, the coalition wrote, "We the undersigned organizations join as one to urge your leadership in reaffirming the Commonwealth's commitment for clean water, and we offer a consensus recommendation for realizing those commitments. Restoring Virginia's waters will require a significant public-private investment and, we believe, a dedication of state revenues."

The groups of the coalition are Chesapeake Bay Foundation, Virginia Farm Bureau Federation, Virginia Agribusiness Council, James River Association, Friends of the Rappahannock, Potomac Conservancy, Virginiaforever, Virginia Poultry Federation, Virginia State Dairyman's Association, and the Virginia Association of Soil and Water Conservation Districts.

"We need a strong partnership between Virginia's farmers and landowners and the state government to achieve our clean water goals," said Virginia Farm Bureau Federation President Wayne F. Pryor. "Farmers are engaged in cost-effective and widely available practices in doing their part to reduce nonpoint source runoff, but that public-private alliance needs to be there to ensure future success."

It is proposed that the \$100 million a year could be achieved by allocating one-tenth of one cent of the state sales tax to the Water Quality Improvement Fund. Farmers would contribute another \$646 million over 10 years as their share.

"Dedicating sales tax revenues and investing those significant resources in the health of our waters and farm economy through implementation of best management practices would demonstrate a strong commitment to advancing the Commonwealth's clean water goals," the coalition's letter states. "Reliable, long-term state funding would also offer an assurance to the farming community that the Commonwealth is a committed partner in this endeavor. This investment would also provide an economic stimulus at the local level in the form of jobs, supplies and equipment."

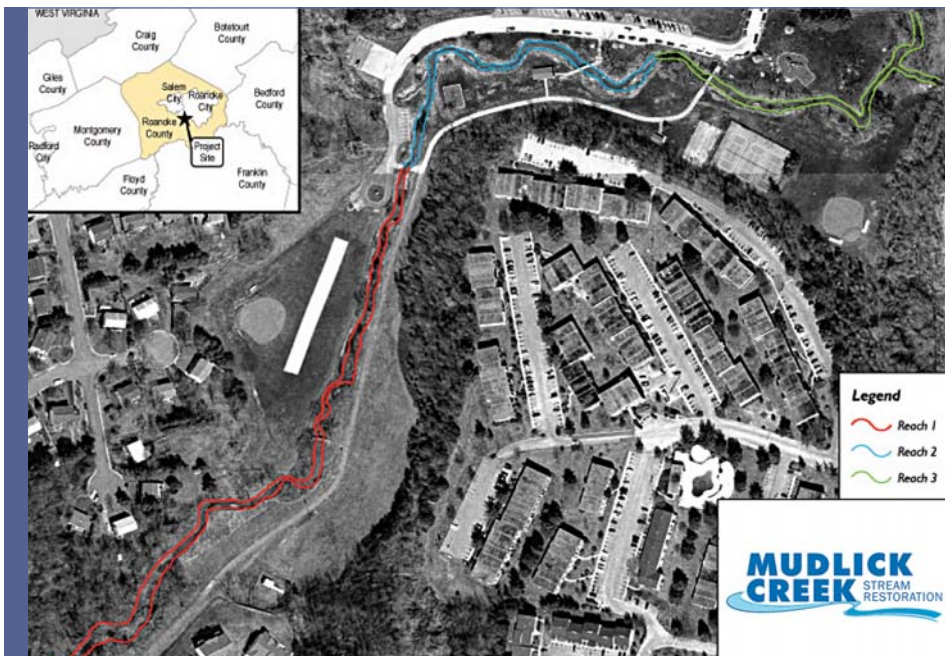
Wastewater treatment plants are receiving programs and funding for upgrades to minimize their impact on Virginia's waters. However, these measures are not enough to achieve the pollution reduction goals needed to meet water quality goals.

Helen Tansey, executive director for Virginiaforever, said, "Over the past four years, Virginia's leadership has made great progress in restoring state waters, including the Chesapeake Bay, by committing resources to upgrade sewage treatment networks. But we must continue to build on this progress and address nonpoint pollution to ensure that our rivers will be restored."

"These groups have put this issue squarely on the radar screen," said DCR Director Joe Maroon. "The breadth of this coalition can only be beneficial as more and more attention must be given to nonpoint source water quality improvements in the future."



# 2007 WQIF



"The challenge is to take this urban stream setting and restore the natural setting with healthy practices. This is what we're doing to reduce pollution and allow access at the same time."

## Chesapeake Bay watershed projects

### Caroline County

The largest alternative wastewater treatment system in Virginia managed by a locality will be installed to replace 92 failing septic systems in their county. This project expands on a 2006 WQIF grant award and a larger county initiative, which aims to replace more than 180 individual septic systems with a system that will be owned and operated by the county. This project will help address fecal coliform problems in Reedy Creek and Herring Creek.

Eldon James, an independent contractor from Eldon James and Associates Inc., manages the project. He describes the treatment process as beginning at each homeowner's property. "Because

treatment begins in the homeowner's tank and ends at the treatment facility, the dispersal field receives only treated water."

Caroline County officials will monitor wells downhill from the dispersal field for contaminants, but because the wastewater released into the field is already treated, there is little chance of contamination. And because of the dispersal field, there is no discharge of treated wastewater directly into state waters.

"This type of system is ideal where the concentration of homes isn't high enough to justify a typical central sewage system," said James. "It's less intrusive on the community since it doesn't require deep excavation for pipe installation. There is no above-ground treatment facility that needs oversight, and it's less expensive to build and operate."

### Headwaters Soil and Water Conservation District (Augusta County)

A residential septic maintenance program will be initiated in parts of Augusta County in partnership with the Augusta

County Service Authority. The fecal coliform-impaired waters of Mossy Creek, Long Glade Run and Naked Creek are targeted. The project will result in approximately 275 septic system pump-outs, 10 septic system installations, 25 septic system repairs and one alternative system installation. A septic system maintenance-tracking system will be established to track dates of septic maintenance and keep a record of dates, landowners and locations where maintenance is performed.

Joelle Hackney, conservation technician for Headwaters Soil and Water Conservation District, talked about how they are choosing areas to target for the sewage maintenance cost-share program.

"We will estimate the number and ages of homes within 100 to 500 feet of three streams in Augusta County: Mossy Creek, Long Glade Run and Naked Creek. Depending on the need of the household, we will be able to pay 50 percent to 75 percent of a septic pump-out or installation with WQIF funds."

She continued, "There is also the possibility of an alternative septic system if a home is too close to the stream for a septic tank. This will be a series of filtration layers that the wastewater will run through to clean it before it reaches the stream."

It is estimated that this program's practices will reduce nitrogen loading by 360 pounds per year and significantly reduce fecal coliform levels.

### Harrisonburg Parks and Recreation

This project's aim is to restore stream banks so that they better filter runoff along an impaired waterway in Harrisonburg. The project also has a lawn care initiative to educate residents and landscaping professionals. Topics such as fertilizing, soil testing, pesticide

See "2007 WQIF," on back page

## 2007 WQIF

use and managing pet waste will be covered. Soil test kits will be given out as part of the campaign.

Jared Stoltzfus, stream health coordinator for the Harrisonburg City Parks and Recreation Department, described different parts of the project.

"We have a CleanStream marketing campaign to educate people about lawn care and its impact on our streams. The first part of the campaign was pet waste awareness. We're now into the second part of the campaign that focuses on proper lawn care."

"With WQIF monies, we will be able to provide educational materials, including soil test kits, to homeowners who want them."

The other part of the project is to restore a total of 1,000 linear feet of stream bank in the Blacks Run watershed, which runs through downtown Harrisonburg.

Stoltzfus said, "We are trying to rethink how we develop in and around our streams. This grant will fund the removal of impoundments and trying to bring the stream back to a more natural state. Several property owners are even giving up their asphalt parking areas to provide natural areas along the stream. People are getting more beautiful properties, while the health of the stream is improving."

This project is estimated to prevent 2,550 pounds of sediment from entering the waterway annually.

*Read*  
**GRASSROOTS**  
*on DCR's website.*

**You can read the *Grassroots* online. Just go to [www.dcr.virginia.gov/grassroots](http://www.dcr.virginia.gov/grassroots). Sign up for a hard copy or email subscription while you're there.**

**Subscriptions  
are free.**

This newsletter was printed  
on recycled paper



Virginia Department of Conservation & Recreation  
203 Governor Street, Suite 213  
Richmond, VA 23219



PRSRT STD  
US POSTAGE  
PAID  
RICHMOND VA  
PERMIT NO 591